EXHIBIT "A"

Disclosure [redacted]

Created By: Christopher R Vincent [redacted]
Last Modified By: Dikran S Meliksetian

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Required fields are marked with the asterisk (*) and must be filled in to complete the form.

Inventors with Lotus Notes IDs

Inventors: Christopher R Vincent/Southbury/IBM, Morris Matsa/Somers/IBM, Julius Quiaot/White Plains/IBM

Inventor Name > denotes primary contact	Inventor Serial	Div/Dept	Manager Serial	Manager Name
Vincent, Christopher R	A3052	7S/GGGA	091447	Grossman, David
*Matsa, Moshe B	711155	7S/GGGA	091447	Grossman, David
Quiaot, Julius C	808905	7S/GGGA	091447	Grossman, David

Main Idea

Title of disclosure (in English)

A pluggable, agent-driven, constraint-based (instant) message delivery service

Idea of disclosure

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

Client-side system for routing instant messages to end users based on high-level delivery rules and mechanism-specific configuration profiles. Utilizes pluggable delivery components to recover from failures

and address changes in the operating environment.

Problem scenarios:
a. Alyssa needs to send her manager, Ben, an urgent message. She uses IBM's instant messaging solution, Sametime, but Ben is not currently running the Sametime client. When Alyssa is unable to send the instant message she sends a page, sends email, and checks Sametime periodically to see if Ben has logged in.
b. Alyssa needs to send her manager, Ben, an urgent message. Fortunately he is currently running Sametime, so she can send him a message. Unfortunately, he is not sitting at his computer, and does not see the message on his screen. After waiting a while, she sends a follow-up message to make sure that he has seen the urgent request. Eventually, she resorts to the methods described above.

With our technology:
a. Alyssa sends the urgent message to Ben. The delivery manager fails to deliver the message via Sametime because Ben is not logged in. Alyssa has previously configured the delivery manager to fallback on additional courses of action for urgent messages. It tries other instant messaging protocols, sending an alphanumeric page, and sending electronic mail. Ben is not logged onto any other instant messaging systems, and was not going to check his email for the rest of the weekend, but the page gets through and the account is saved!
b. Alyssa sends the urgent message to Ben. Alyssa has configured her delivery manager to resend urgent messages after 10 minutes if there is no response. After that period, the system automatically tries again, eventually falling back to sending an alphanumeric page and electronic mail.

Advantages of this technology include:

a. Higher rates of successful message delivery as compared to state of the art instant messaging solutions.
b. Incorporates delivery mechanisms not typically associated with instant messaging (pagers, email).
c. Provides users with fine-grained, accurate control over message routing behavior, without requiring interaction on a per-message basis.
d. Support for new message delivery mechanisms (pluggable system components) may be implemented and distributed apart from the core system. Allows incremental refinements and extensions of

2. How does the invention solve the problem or achieve an advantage,(a description of "the invention", including figures inline as appropriate)?
Messaging clients (both human driven and automated) utilize a set of predefined protocols for end-to-end delivery of instant messages. Our invention inserts pluggable delivery manager agents into the message routing process. These delivery manager agents assume responsibility for delivering individual messages, routing and retrying messages by dynamically selecting from a set of available network protocols. This provides robust message delivery by automatically leveraging and dynamically configuring many unreliable services simultaneously.

Users specify protocol-specific configuration parameters and general delivery preferences. Client-side delivery managers efficiently route messages by applying these constraints based on the current operating environment and individual message requirements.

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?
The IBM Sametime Connect client communicates over either the Sametime protocol or the AIM protocol, but the user must specify which protocol to use for an individual message. There is no way of adding other protocols or alternative delivery mechanisms.

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Other protocol-spanning clients have emerged in the market since our work on this technology, but they do not appear to be extensible with respect to additional protocols, and are not highly configurable.

We believe that these other products do not have the advantages we listed above. They are limited to combining the functionality of several existing chat clients into one interface, whereas we focused on dynamically composing the underlying protocols to provide robust and flexible message routing.

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.
It was implemented as part of the Extreme Chat prototype, developed starting in May 1999. It was implemented on the Windows platform, managing five communications protocols. In an internal demonstration to management, it successfully sent messages over an instant messaging protocol, until one party logged off and it fell back to paging.

The prototype has neither been released nor demonstrated outside of IBM. High-level descriptions of the technology have appeared in the press.

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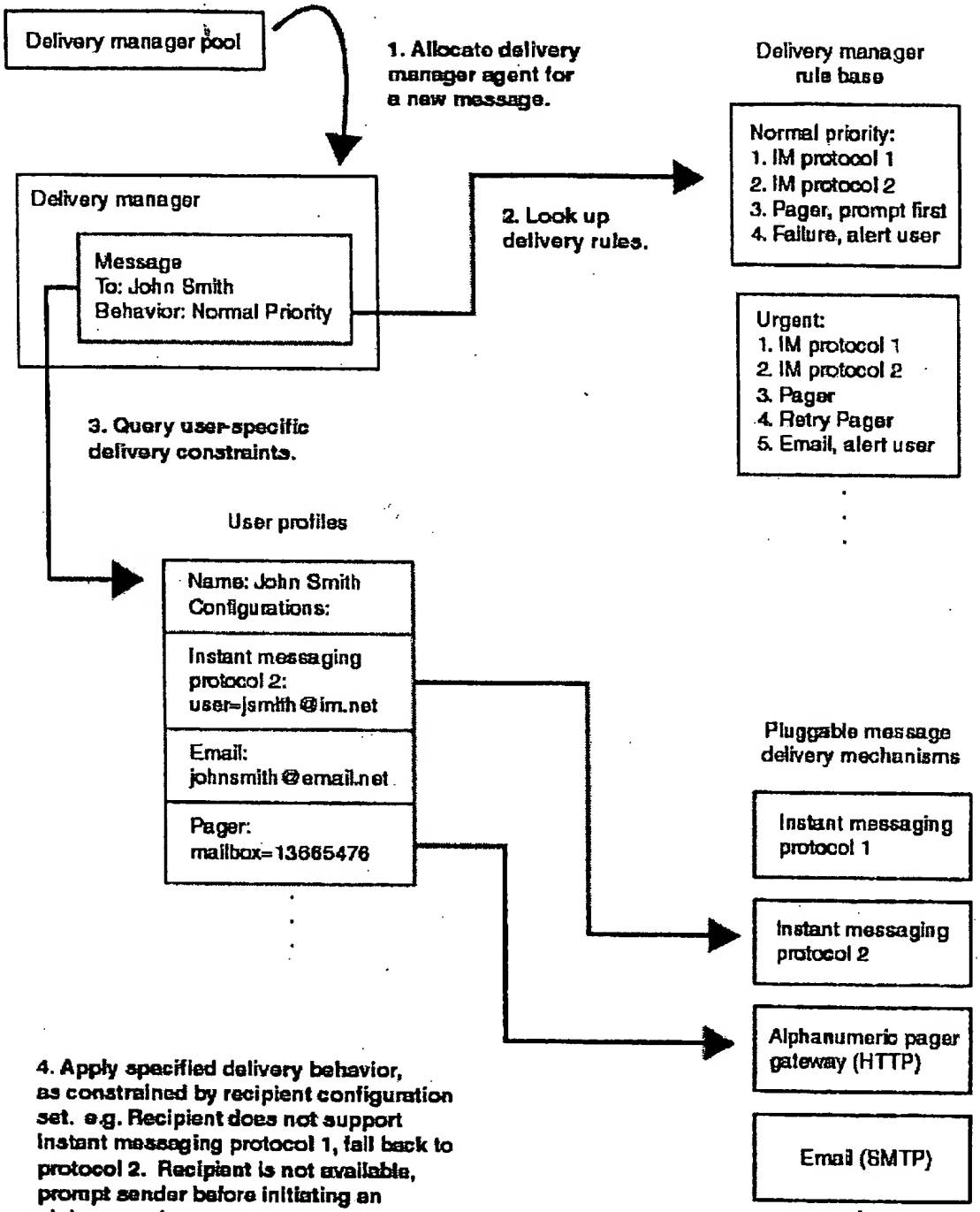
[redacted] A pluggable, agent-driven, constraint-based (instant) message delivery service - continued



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